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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/761,545	01/20/2004	Hanspeter Schad	DT-6742	2853

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EXAMINER

NASH, BRIAN D

ART UNIT	PAPER NUMBER
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3721

DATE MAILED: 02/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/761,545	Applicant(s) SCHAD, HANSPETER	
	Examiner Brian Nash	Art Unit 3721	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 June 2004.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-6 and 8 is/are rejected.
7) ☒ Claim(s) 7 and 9-11 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 20 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 5/20/04.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

2. The abstract of the disclosure is objected to because it is in claim form and contains legal terminology such as "means" in lines 3 and 5 – see underlined text below. Correction is required. See MPEP § 608.01(b).
3. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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5. Claims 6 and 8 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. In claim 6 it is not clear from the specifications how a “vibration coupled piezo actor-housing system is jointly synchronized with the first longitudinal natural vibration of the piezo actor”. Specifically, how is the piezo actor synchronized and how does claim 6 further limit the structure of applicant’s invention?

In claim 8, it is not clear how a counter controls the pulse generation of the voltage pulse-generating unit. The examiner notes that on page 5 of the specifications it is disclosed that DE 19830415 (hereinafter DE ‘415) has a voltage pulse generating mechanism that is automatically triggered when an impact force is detected at the piezo element. Without knowing “how” a counter controls the pulse generation, it appears that DE ‘415 automatically controls the pulse generation by an obviously similar means.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 3, 5 and 6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 3, lines 2-3 are vague, indefinite, and confusingly worded because it is not clear what applicant is claiming. Specifically, what does the phrase “optimally dampingly tuned to the vibration mode” mean? Furthermore, it is not clear if applicant is invoking 35 U.S.C. 112, sixth

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paragraph regarding a “damping means” since the claim is not in the standard “means for” format. The examiner has construed the claim to define the handle is connected to the housing by any damping means.

Similarly in claim 5, it is not clear if applicant is invoking 35 U.S.C. 112, sixth paragraph regarding a “spring means” since the claim is not in the standard “means for” format. The examiner has construed “spring means” to define any spring.

In claim 6, the terminology “vibration coupled piezo actor-housing system” is vague, indefinite, and confusing because it is not clear what the claim encompasses with the phrase. Specifically, is applicant referring to the entire hand-held percussion tool or just a part of it? Additionally and noted above in this office action, it is not clear how the “housing system” is “jointly synchronized with the first longitudinal natural vibration of the piezo actor” which further makes the claim indefinite.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by DE 19830415 (hereinafter DE ‘415). DE ‘415 shows the same invention including a hand-held electrical tool having a striking means for generating impact forces on the anterior of the tool, a housing enclosing the striking means, and a handle affixed thereon, wherein the striking means is formed

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as a high-energy piezo actor connected to a voltage pulse generating unit fixed to the tool housing. According to applicant's description in the specification on pages 4-5, DE '415 shows a hand-held electrical tool having rearward handle (21), a pulse striking mechanism (12,14) that drives a probe, i.e. a tool, along a striking axis and through the ground via a high-energy piezo element (see Figs. 1,2 of DE '415) via impact forces generated by the abrupt expansion of the voltage pulse generation on an anvil (14) which accelerates a spring-biased (18) piston (11) and then effects an impact force on the anvil via the piezo element.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 2-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over DE '415. As discussed above, DE '415 discloses the invention substantially as claimed, but does not show a handle connected to a vibration node of the tool housing or connected via a vibration damping means. While the specific location of the handle may be connected to a vibration node of the tool at rest, operation of the tool creates other vibration forces thereby changing the specific location of the vibration node. Therefore, it is reasonable to conclude that any handle connected to the tool is connected to a vibration node at some point during the operation of the tool.

Regarding the handle connected to the tool via a damping means, it is well known in the art to provide damping means to tools creating excessive vibration forces, especially hand-held

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tools that affect the operator. Additionally, applicant has pointed out that DE '415 creates strong housing vibrations which should preferably be subdued in electrical hand-held power tools, especially in the handle (see specifications, page 5, lines 7-9. Official Notice is taken that both the concept and the advantages of providing electrical hand-held power tools that generate excessive vibration forces with handles that are attached via damping means are well known in the art for the purpose of isolating the vibration from the operator. It would have been obvious to provide the hand-held tool of DE '415 with damping means for the handle in order to isolate the operator from excessive vibrations.

12. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over DE '415 in view of US 6,286,610 to Berger et al. As discussed above in this office action, DE '415 discloses the invention substantially as claimed, but does not show a handle or handles configured as a main rear handle and second side handle. Berger et al teach the use of a first (16) and second (17) handle connected to a percussion hand-held tool for the purpose of reducing the vibrations acting on the hand or arm of the operator guiding the tool to an negligible amount. It would have been obvious to one skilled in the art to configure/modify the tool of DE '415 in order to incorporate a double handle for the purpose of reducing vibrations to the operator, since such a modification is within the engineering purview of the skilled artisan concerned with reducing the vibration forces affecting a tool operator.

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Allowable Subject Matter

13. Claims 7 and 9-11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

14. Regarding claim 6 and as noted above in this office action the claim is indefinite. At this time it is indeterminate if the claim is anticipated or allowable over the prior art.

Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Weiss, Lewis et al, Byron et al, Miller, Riley, Heermann et al, Amtsberg, Notaras et al, Hukase, Bongers-Ambrosious, Voulkidis et al, Kristen et al, and Meixner et al are cited to show related references.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Nash whose telephone number is 571-272-4465. The examiner can normally be reached on Monday – Thursday from 8 a.m. to 5 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi I. Rada can be reached at 571-272-4467.

The official fax number for this Group is: 703-872-9306

Brian Nash
27 January 2005

A handwritten signature in black ink, appearing to read 'Rinaldi I. Rada', with a long horizontal flourish extending to the right.

Rinaldi I. Rada
Supervisory Patent Examiner
Group 3700